Forest Habitat Type Classification System (FHTCS) Update

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The Forest Habitat Type Classification System (FHTCS) has been developed for common upland forest sites and plant communities within Wisconsin. The system includes borderline upland/lowland sites (somewhat poorly drained soils) in northern and central Wisconsin. Currently, the system is being expanded to incorporate forest lowland sites and community types (poorly drained soils). Major tools for system application are a northern guide, a southern guide, and habitat type software. The FHTCS is summarized in the Silviculture Handbook, Chapter 12.

Wisconsin FHTCS Software

Habitat type software is now available on a CD. This software can aid habitat type identification and interpretation.

An executable program enables habitat type identification based on a user supplied list of plants collected from a homogeneous forested site. Plant lists can be entered manually by selecting species from a list or entered from an Access database. The program will identify the most likely and second most likely habitat types for the selected region, and the level of confidence in the classification. Descriptions of each selected habitat type are provided.

Most of the information contained in the two habitat type guides is included on the CD, but it has been synthesized and reorganized to limit repetition and to facilitate presentation and navigation within the electronic format. Plant photos, ecological distributions, and habitat type descriptions are included. The support system includes instructions on how to collect data appropriately, how to identify habitat types, and how to use the software. The software can be run from the CD or loaded onto a hard drive.

This software is not intended to replace the guides; it is intended to augment the classification system in Wisconsin. In application, the program can be utilized to confirm, check, or provide a “second opinion” of field designations. It also can facilitate the relatively rapid collection of large amounts of data by eliminating the need for field identification of habitat types; plant lists can be collected rapidly from many sites and then habitat type designation can proceed electronically. In addition, the program can help reduce significant habitat type identification errors associated with system misapplication by untrained users. CDs are available by request from Joe Kovach of Wisconsin Department of Natural Resources – Division of Forestry.

FHTCS for Wet Lowlands

Forested lowlands comprise about 17% of Wisconsin’s forest lands. However, the Wisconsin FHTCS currently does not include common lowland site and community types. A lowland FHTCS could provide or augment an ecological framework for implementing, monitoring, and assessing silvicultural practices and forest management decisions. WDNR Forestry has contracted with Terra Silva Consultants, owned and operated by Dr. John Kotar, to develop FHTCS for forested lowlands.

The first year of field sampling was completed during the summer of 2005 in and around the Northern Highland – American Legion State Forest in Vilas and Oneida Counties. Vegetation and soil were studied at 82 plots. Four-to-five preliminary lowland habitat types have been delineated and partially characterized. These floristic associations reflect the relative depth and period of substrate water saturation and nutrient availability.

During the summer of 2006, field sampling will begin by re-sampling some of the 2005 plots to evaluate annual and seasonal changes in vegetation. Then, the sampling area will be expanded into Price, Sawyer, Iron, and/or Ashland Counties, where finer textured soils prevail. Following the third field season in 2007, a preliminary classification for habitat type region 3 will be developed.

The initial lowland FHTCS will focus on habitat type region 3, covering a large portion of northern Wisconsin. Sampling, data analysis, and classification will proceed region by region. Once selected regions are completed, field guides and training will be provided. At the current rate of funding, geographic progress across the state will be slow.